U.S. DEPARTMENT OF ENERGY ELECTRONICS STEWARDSHIP PLAN





July 2006

Office of Pollution Prevention and Resource Conservation EH-43

Department of Energy (DOE) Electronics Stewardship Plan

INTRODUCTION – In support of the DOE Assistant Secretary for Environment, Safety and Health, DOE's Agency Environmental Executive (AEE), the Office of Pollution Prevention and Resource Conservation Policy and Guidance (EH-43) has developed the following plan of activities for sustainable electronics stewardship Department-wide that includes:

- purchasing "green" electronic products (desktop computers, notebooks and monitors);
- reducing the impacts of electronic products; and
- managing obsolete electronics in an environmentally safe manner.

On November 15, 2004, DOE along with several other Federal agencies and the Executive Office of the President signed a Memorandum of Understanding to improve the environmental management of Federal electronic assets throughout their life-cycle (i.e., procurement, operation and disposition). The plan outlines and reports on actions to be taken within the Department to fulfill its commitment as a signatory to the Memorandum of Understanding and to meet the objectives of the Office of Management and Budget Environmental Stewardship Scorecard, including coordination with other DOE entities as appropriate. This plan consists of the following types of action items: General, Acquisition and Procurement, Operations and Maintenance, and End of Life Recycling.

ACTION ITEM	TARGET COMPLETION DATE	ACTUAL COMPLETION DATE
GENERAL ACTIONS		
DOE AEE signs the Memorandum of Understanding (MOU) Promoting Sustainable Environmental		
Stewardship of Federal Electronic Assets, agreeing to participate in the Federal Electronics Challenge		11/15/04
(FEC).		
DOE Chief Information Officer (CIO) and AEE sign memo to all DOE program and field elements		
stating the Department's commitment to sustainable environmental stewardship of Federal electronic		6/05
assets and encouraging participation as FEC Partners.		
EH-43 representatives actively participate in the Federal Electronic Stewardship Working Group	6/07	
(FESWG), including attending monthly meetings, annual conferences, and OMB Scorecard retreat.		
DOE Headquarters Environmental Management System (EMS) incorporates into its objectives and		
targets the environmentally preferable purchasing of "green" desktop computers, notebooks and		1/06
monitors, and the environmentally responsible disposition of surplus electronics through reuse and end-		1/00
of-life electronics recycling.		

Thirteen DOE sites become FEC Partners. FEC Award Winners include Gold Award winner		
Bonneville Power Administration, Silver Award winners Pacific Northwest National Laboratory, and		5/06
Bronze Award winners Kansas City Plant, DOE Headquarters (HQ), and Lawrence Livermore National		3/00
Laboratory.		
Deputy Secretary of Energy approves DOE Order 450.1, Chg 2, Environmental Protection Program,		
establishing new pollution prevention and sustainable environmental stewardship goals to be achieved		
by DOE sites through the integration of pollution prevention into their Environmental Management		
Systems. Strategies for achieving the new goals are also provided in the Order, including electronic		12/05
stewardship-related strategies on environmentally preferable electronics procurement, enabling		
electronics power management capabilities, reuse of surplus electronics, and recycling of end-of-life		
electronics.		
DOE sites are required to monitor progress toward achieving electronics stewardship goals and		
strategies and track such information, in order to report to the DOE AEE progress under the Greening	3/07	
the Government Executive Orders 13101 and 13148 and to report to the OFEE and OMB progress for	3/07	
Scorecard purposes.		
Closing the Circle Newsletter recognizes DOE's inclusion of electronics stewardship-related strategies		
under the new pollution prevention and sustainable environmental stewardship goals established in		3/06
DOE Order 450.1 Chg 2.		
EH-43 will update the DOE Pollution Prevention Performance Tracking and Reporting System to		
incorporate electronics stewardship-related performance measures on environmentally preferable	10/06	
purchasing of EPEAT-registered computers and monitors, reuse of surplus electronics, and recycling of	10/06	
end-of life electronics by DOE sites.		
To meet 2006 progress reporting requirements for DOE Order 450.1 Chg 2 and Executive Orders 13148		
and 13101, DOE AEE issues annual data call requesting all DOE sites to report annual quantitative		
performance regarding life cycle management of electronic assets, including procurement of EPEAT-	10/06	
registered computers and monitors, reuse of surplus electronics, and recycling of end-of-life electronics.		
DOE AEE 2006 Pollution Prevention (P2) Star awards presented to four DOE sites for exemplary		
environmental stewardship of electronic assets: Pacific Northwest National Laboratory; Fermi National		4/06
Accelerator Laboratory; Sandia National Laboratory-NM, and the Savannah River Site.		1,700
EH-43 will feature electronics stewardship strategies for achieving DOE Order 450.1, Chg 2 pollution		
prevention and sustainable environmental stewardship goals in a series of EMS continuous	6/07	
improvement workshops being developed on Federal leadership initiatives.		
EH-43 continues to conduct outreach activities to educate Federal and contractor personnel at DOE sites	7/07	
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Regulations (DEAR)—"Acquisition and Use of Environmentally Preferable Products and Services" (48		
CFR 970.5204) and "Affirmative Procurement Program" (48 CFR 970.5223-2)—to specify DOE		
purchasing of EPEAT-registered electronic products.		
EH-43 and ME-61 (Office of Procurement and Assistance) will determine viability and utility of		
amending the DOE Acquisition Guide (Chapter 23) and the DOE Environmentally Preferable	3/07	
Purchasing Program Overview to address the specification of EPEAT- registered products (computers	3/07	
and monitors) in DOE acquisition contracts.		
OPERATIONS AND MAINTENANCE ACTIONS		
DOE Order 450.1, Chg 2, Environmental Protection Program establishes new pollution prevention and		
sustainable environmental stewardship goals to be achieved by DOE sites through the integration of		
pollution prevention into their Environmental Management Systems. Strategies for achieving the new		12/05
goals are also provided in the Order, including electronics stewardship-related strategies such as		
enabling electronics power management capabilities of desktop computers, notebooks, and monitors.		
The DOE CIO COE implements best management practices to reduce energy consumption at DOE		
Headquarters, including:		
After-hours shut down of non-critical electronics and electrical equipment in coordination with		
network security;		4/06
ENERGY STAR® power management features as default;		., 00
 Implementation and evaluation of use of power management tools (i.e., EZ software); 		
 Employee training on energy conservation. 		
To meet 2006 progress reporting requirements for DOE Order 450.1 Chg 2 and Executive Orders 13148		
and 13101, DOE AEE issues annual data call requesting DOE sites to report annual quantitative		
performance regarding best management practices in-place at DOE sites for enabling electronics power	12/06	
management capabilities of desktop computers, notebooks, and monitors.		
END OF LIFE REUSE AND RECYCLING ACTIONS		
DOE Order 450.1, Chg 2, Environmental Protection Program, establishes new pollution prevention and		
sustainable environmental stewardship goals to be achieved by DOE sites through the integration of		
pollution prevention into their Environmental Management Systems. Strategies for achieving the new		
goals are also provided in the Order, including electronics stewardship-related strategies such as		1/06
utilizing accredited recycling services as an environmentally compliant means for disposition of end-of-		
life electronics (e.g., EPA's Recycling Electronics and Asset Disposition (READ) Services Government		
Wide Acquisition Contract, Federal Prison Industries (UNICOR) Electronic Recycling Program, and		
General Services Administration Federal Supply Service Multiple Award Schedule 899 Reclamation,		

Recycling, and Disposal Services).		
DOE-HQ EMS incorporates into its objectives and targets the environmentally responsible disposition	1/06	1/06
of surplus electronics through reuse and end-of-life electronics through recycling.		1/00
EH-43 participates in DOE Property Management Conference and provides presentations on the Federal		5/06
electronic stewardship initiative and DOE Order 450.1 Chg 2.		5/06
EH-43 continues to conduct outreach activities to educate federal and contractor property managers at	C/07	
DOE sites on recycling of end-of-life electronics, including workshops and newsletter articles.	6/07	
DOE AEE issues memorandum encouraging all DOE program and field elements to participate in the		11/05
2006 Federal Electronics Recycling and Reuse Challenge (FERRC).		11/05
Eleven DOE sites participate in 2006 FERRC. DOE recycles half million pounds of surplus electronics		1.10.5
and wins 2006 FERRC Agency Award.		4/06
DOE's Kansas City Plant and Waste Isolation Pilot Plant win 2006 FERRC Facility Awards.		
Brookhaven National Laboratory recycles the most pounds of any Large Eastern FERRC facility.		4/06
LLNL recycles the most pounds of all FERRC facilities.		
To meet 2006 progress reporting requirements for DOE Order 450.1 Chg 2 and Executive Orders 13148		
and 13101, DOE AEE issues annual data call requesting DOE sites to report annual quantitative	10/06	
performance regarding reuse of surplus electronics and recycling of end-of-life electronics, specifically,	10/06	
desktop computers, notebooks, and monitors.		
DOE AEE issues memorandum encouraging all DOE program and field elements to participate in the		
2007 Federal Electronics Recycling and Reuse Challenge (FERRC).	11/06	
EH-43 will provide technical assistance to DOE sites to support applications for 2007 FERRC facility		
awards.	4/07	
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